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NO. 9867 P. 3/7

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Application No. 10/689,817
Response to Office Action

AUG 29 2005

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R E M A R K S

Reconsideration of this application, as amended, is respectfully requested.

THE CLAIMS

Claim 1 has been amended to clarify the feature of the present invention whereby a level of a surface of the ink in the ink reservoir is different from a level of the nozzle such that negative pressure is applied to the ink in the nozzle. And it is respectfully pointed out that the application of negative pressure to the ink in the nozzle is described in the specification at, for example, page 5, lines 4-10. In addition, Fig. 1 shows a difference in height "h" between the surface of the ink in the reservoir and the nozzle, whereby negative pressure is applied to the ink in the nozzle.

Claims 1-3 have also been amended to make some minor grammatical improvements and/or to correct some minor antecedent basis problems so as to put the claims in better form for issuance in a U.S. patent. The informality pointed out by the Examiner has been corrected.

No new matter has been added, and it is respectfully requested that the amendments to the claims be approved and entered and that the rejection under 35 USC 112, second paragraph, be withdrawn.

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It is respectfully submitted, moreover, that the amendments to the claims are not related to patentability, and do not narrow the scope of the claims either literally or under the doctrine of equivalents.

THE PRIOR ART REJECTION

Claims 1-3 were rejected under 35 USC 103 as being obvious in view of the combination of USP 6,213,596 ("Nowell, Jr. et al"), USP 5,910,810 ("Brooks et al") and USP 6,557,990 ("Altendorf"). This rejection, however, is respectfully traversed.

On page 2 of the Office Action, the Examiner acknowledges that Nowell, Jr. et al does not disclose that a level of a surface of the ink in the ink reservoir is different from a level of the nozzle such that negative pressure is applied to the ink in the nozzle, and the Examiner also acknowledges that Nowell, Jr. et al does not disclose a preventative member in the manner of the present invention as recited in claim 1.

For this reason, the Examiner has cited Altendorf for the disclosure of a preventive member. In particular, the Examiner asserts that the ball-like evacuated structures 20, evacuated structure 22 and semi-permeable membrane 42 of Altendorf each correspond to the preventative member of the present invention as

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recited in claim 1 (evacuated structure 22), claim 2 (evacuated structures 20) and claim 3 (semi-permeable membrane 42).

It is respectfully pointed out, however, that the evacuated structures 20, evacuated structure 22 and semi-permeable membrane 42 of Altendorf all function to capture air by allowing air to slowly diffuse across the material thereof, as long as the pressure in the evacuated structures 20 and 22 and on the evacuated side of the semi-permeable membrane 42 is less than the pressure above the fluid 14.

Thus, the evacuated structures 20, evacuated structure 22 and semi-permeable membrane 42 of Altendorf do not prevent contact between the fluid 14 and air, but rather, when air enters the space above the fluid 14 (i.e., when air is released from the fluid 14 or inadvertently admitted into the space above the fluid 14), the evacuated structures 20, evacuated structure 22 and semi-permeable membrane 42 function to capture the air by allowing it to slowly diffuse through the materials thereof, thereby removing the air from around the fluid 14.

In addition, it is respectfully pointed out that once enough air has been captured such that the pressure is equalized on both sides thereof, the evacuated structures 20, evacuated structure 22 and semi-permeable membrane 42 of Altendorf no longer capture any more air.

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Accordingly, it is respectfully submitted that Altendorf does not disclose, teach or suggest a preventative member that prevents contact between the ink and air, in the manner of the present invention as recited in claim 1.

Still further, it is respectfully pointed out that as recited in claim 1, the preventative member of the present invention floats on the surface of the ink in the ink reservoir. By contrast, the semi-permeable membrane 42 of Altendorf is held above the fluid 14, as shown in Fig. 3 thereof. Therefore, it is respectfully submitted that semi-permeable membrane 42 of Altendorf clearly does not correspond to a preventative member comprising a plate that floats on the surface of the ink in the ink reservoir and prevents contact between the ink and air, in the manner of the present invention as recited in claim 3.

Brooks et al, moreover, has merely been cited for the disclosure of applying negative pressure to the ink in the nozzle, and does not disclose, teach or suggest a preventative member in the manner of the claimed present invention.

Applicants have reviewed the remaining references and found them to be no more pertinent.

In view of the foregoing, it is respectfully submitted that the present invention as recited in independent claim 1, and claims 2 and 3 depending therefrom, clearly patentably distinguishes over the combination of Nowell, Jr. et al, Brooks

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et al and Altendorf, taken singly or in any combination
consistent with the respective fair teachings thereof under
35 USC 103.

* * * * *

Entry of this Amendment, allowance of the claims and the
passing of this application to issue are respectfully solicited.

If the Examiner has any comments, questions, objections or
recommendations, the Examiner is invited to telephone the
undersigned at the telephone number given below for prompt
action.

Respectfully submitted,


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